

AMENDMENTS

The following listing of claims replaces, without prejudice, all prior versions, and listings, of claims in the application.

1-37 (canceled).

38 (Currently amended) ~~A cardiac catheter as claimed in Claim 33~~ having a distal end and a wall, the catheter comprising a heat transfer device located approximately at its distal end wherein the heat transfer device is engaged with a catheter wall and a temperature sensing element to measure native blood temperature, wherein the heat transfer device is a flexible film having at least one electrical resistor flow path and includes at least one temperature sensor included on or within the heat transfer device film to monitor the temperature of the electrical flow paths and thus the temperature of the overall heat transfer device wherein the heat transfer device is disposed directly onto the catheter wall.

39 (Previously presented) A cardiac catheter as claimed in Claim 38 wherein the heat transfer device is disposed onto the catheter wall by a deposition process.

40 (Previously presented) A cardiac catheter as claimed in Claim 39 wherein the deposition process is a plasma deposition process.

41 (Previously presented) A cardiac catheter as claimed in Claim 39 wherein the deposition process is a printing process.

42 (Previously presented) A cardiac catheter as claimed in Claim 41 wherein the printing process uses a conductive medium, with subsequent etching.

43 (Currently amended) ~~A cardiac catheter as claimed in Claim 33~~ having a distal end and a wall, the catheter comprising a heat transfer device located approximately at its distal end wherein the heat transfer device is engaged with a catheter wall and a temperature sensing element to measure native blood temperature, wherein the heat transfer device is a flexible film having at least one electrical resistor flow path and includes at least one temperature sensor included on or within the heat transfer device film to monitor the temperature of the electrical flow paths and thus the temperature of the overall heat transfer device wherein the temperature sensor is also disposed onto the catheter wall by a deposition process.

44 (Currently amended) ~~A cardiac catheter as claimed in Claim 33~~ having a distal end and a wall, the catheter comprising a heat transfer device located approximately at its distal end wherein the heat transfer device is engaged with a catheter wall and a temperature sensing element to measure native blood temperature, wherein the heat transfer device is a flexible film having at least one electrical resistor flow path and includes at least one temperature sensor included on or within the heat transfer device film to monitor the temperature of the electrical flow paths and thus the temperature of the overall heat transfer device wherein at least one insulator layer is located over the electrical resistor flow path.

45 (Previously presented) A cardiac catheter as claimed in Claim 44 wherein at least one insulator layer is made from parylene C.

46 (Currently amended) ~~A cardiac catheter as claimed in Claim 33~~ having a distal end and a wall, the catheter comprising a heat transfer device located approximately at its distal end wherein the heat transfer device is engaged with a catheter wall and a temperature sensing element to measure native blood temperature, wherein the heat transfer device is a flexible film having at least one electrical resistor flow path and includes at least one temperature sensor included on or within the heat transfer device film to monitor the temperature of the electrical flow paths and thus the temperature of the overall heat transfer device wherein the heat transfer device comprises an outwardly located layer of material selected from a group consisting of silver or gold.

47 (Currently amended) ~~A cardiac catheter as claimed in Claim 33~~ having a distal end and a wall, the catheter comprising a heat transfer device located approximately at its distal end wherein the heat transfer device is engaged with a catheter wall and a temperature sensing element to measure native blood temperature, wherein the heat transfer device is a flexible film having at least one electrical resistor flow path and includes at least one temperature sensor included on or within the heat transfer device film to monitor the temperature of the electrical flow paths and thus the temperature of the overall heat transfer device wherein a length of the outer wall of the catheter is at least partly formed from doped material able to act as a heat transfer device upon application of power therethrough.

48 (Previously presented) A cardiac catheter as claimed in Claim 47 wherein the doped material is selected from the group consisting of silver or gold.

49 (Currently amended) A cardiac catheter ~~as claimed in Claim 33~~ having a distal end and a wall, the catheter comprising a heat transfer device located approximately at its distal end wherein the heat transfer device is engaged with a catheter wall and a temperature sensing element to measure native blood temperature, wherein the heat transfer device is a flexible film having at least one electrical resistor flow path and includes at least one temperature sensor included on or within the heat transfer device film to monitor the temperature of the electrical flow paths and thus the temperature of the overall heat transfer device wherein the catheter wall has at least one metal wire in at least a portion of the wall.

50 (Previously presented) A cardiac catheter as claimed in Claim 49 wherein at least one wire is copper.

51 (Previously presented) A cardiac catheter as claimed in Claim 49 wherein at least one wire is co-extruded within the catheter body.

52 (Previously presented) A cardiac catheter as claimed in Claim 49 wherein the catheter wall includes at least one set of wires.

53 (Previously presented) A cardiac catheter as claimed in Claim 52 wherein the catheter body has three sets of wires, each set comprising two wires.

54 (Currently amended) A cardiac catheter as claimed in claim 49 wherein each wire ~~(38)~~ inside the catheter wall is easily exposable.

55-57 (canceled)